

CT DETECTOR HAVING AN OPTICAL MASK LAYER

Abstract

An optical mask layer for a CT detector is disclosed and is disposed between the photodiode array and scintillator array of a CT detector. The optical mask layer, which may extend along the x-axis, z-axis, or both, is designed to absorb and/or reflect light emitted by the scintillators of the scintillator array. Through this absorption and/or reflection, transference of light photons from a scintillator to the photodiode corresponding to a neighboring scintillator is reduced. This reduction in cross-talk reduces artifacts in a reconstructed image and therefore improves the diagnostic value of the image.